are provided to correspond to the coupling protrusions **205**. By inserting the coupling protrusions **205** into the coupling holes **234** provided at the intermediate cover **23**, the intermediate cover **23** may be installed at the upper surface of the case **20**.

[0063] A chamber **230** into which air discharged from the case **20** via the outlet **202** is introduced may be provided in the intermediate cover **23**. An opening **231** into which the grill **240** of the grill assembly **24** is inserted may be formed in the intermediate cover **23**. A diameter D**3** of the opening **231** may be the same as the diameter D**1** of the grill **240** of the grill assembly **24**.

[0064] The microfilter **25** may be installed in the intermediate cover **23**. Dust may be filtered again while the air discharged via the outlet **202** passes through the microfilter **25**. An opening **250** through which the grill **240** of the grill assembly **24** passes may be formed at the microfilter **25**. A diameter D**4** of the opening **250** may be the same as the diameter D**1** of the grill **240**.

[0065] The intermediate cover **23** may be provided with a mounting part **235** on which the microfilter **25** may be mounted. The mounting part **235** may be positioned at an upper side of the intermediate cover **23**. When the microfilter **25** is mounted on the mounting part **235**, an upper surface **236** of the intermediate cover **23** and the microfilter **25** may be positioned to be spaced apart from each other.

[0066] The intermediate cover **23** may be provided with supporters **232** which support the microfilter **25**. The supporters **232** may be positioned on a periphery of the opening **231**. The supporters **232** may include a plurality of first supporters **232***b* which protrude from the upper surface **236** of the intermediate cover **23**, and a second supporter **232***a* which connects the plurality of first supporters **232***b* and on which the microfilter **25** is mounted. The plurality of the first supporters **232***b* may be arranged along a perimeter of the opening **231**. The second supporter **232***a* may be provided to have the same shape as the opening **231**. A diameter of the second supporter **232***a* may be the same as or greater than the diameter of the opening **231**.

[0067] The air discharged via the outlet **202** is introduced into the side of the intermediate cover **23** via the opening **231**, and may be introduced into the chamber **230** formed in the intermediate cover **23** via a space formed between adjoining first supporters **232***b*. The air introduced into the chamber **230** may pass through the microfilter **25** positioned at an upper part of the intermediate cover **23** to flow to the side of the upper cover **22**.

[0068] The upper cover **22** may be provided with an exit **221** from which air may be discharged. The air from which dust is filtered may escape to the outside via the exit **221**.

[0069] An opening **220** through which the grill **240** of the grill assembly **24** passes may be formed in the upper cover **22**. A diameter D**5** of the opening **220** may be the same as the diameter D**1** of the grill **240**.

[0070] A cleaning part **238** which may eliminate dust or the like adhered to a surface of the grill **240** may be provided at an inner side of the upper cover **22** adjacent to the opening **220** or at a bottom surface of the intermediate cover **23** adjacent to the opening **231**. The cleaning part **238** may be provided to protrude downward from the bottom surface of the intermediate cover **23**. The cleaning part **238** may be provided to be in contact with the surface of the grill **240**. Dust or the like adhered to the grill **240** may be removed by an inside surface of the intermediate cover **23** which forms the opening **231**. A position of the cleaning part **238** is not limited to the above descriptions.

[0071] The upper cover **22** may be detachably installed at the intermediate cover **23**. The upper cover **22** and the intermediate cover **23** may be installed by a hook method. The upper cover **22** may be provided with a hook part **223**, and the intermediate cover **23** may be provided with an engaging part **237** which may be engaged with the hook part **223**. A plurality of hook parts **223** may be provided and be disposed to be spaced apart along an outer side surface of the upper cover **22**. A plurality of engaging parts **237** may be disposed to be spaced apart along an outer side surface of the intermediate cover **23** to correspond to the hook parts **223**.

[0072] Each of the engaging parts **237** may include a first engaging part **237***a* and a second engaging part **237***b* bent from the first engaging part **237***a*. When the upper cover **22** is positioned on an upper part of the intermediate cover **23** so that the hook part **223** and the engaging part **237** do not interfere with each other and the upper cover **22** rotates in one direction, the hook part **223** formed at the upper cover **22** may be engaged by the first engaging part **237***a* formed at the intermediate cover **23**.

[0073] Here, the second engaging part **237***b* may serve the role of a stopper which prevents the upper cover **22** from rotating in the one direction. Specifically, the second engaging part **237***b* may prevent the hook part **223** from continuing to rotate in the one direction and leaving the first engaging part **237***a*. A user may release a state in which the hook part **223** is engaged by the first engaging part **237***a* by rotating the upper cover **22** in the other direction, and may detach the upper cover **22** from the intermediate cover **23**.

[0074] The upper cover **22** may be provided with a handle **28**. The handle **28** may be integrally injection-molded with the upper cover **22**. The handle **28** may be provided with a locking groove **281** into which a locking part **271** provided at an operation part **27**, which will be described below, is inserted.

[0075] The operation part **27** may be provided at one side of the grill assembly **24**. The grill assembly **24** and the operation part **27** may be integrally formed. The grill assembly **24** may include the grill **240** in which the air passing holes **241** are formed. The grill **240** may be inserted into the case **20**. When the grill **240** is inserted into the case **20**, the operation part **27** may be provided to be positioned outside the upper cover **22**.

[0076] The grill **240** may be provided in a hollow cylindrical shape. The air passing holes **241** formed in the grill **240** may include first air passing holes **241***a* through which the air from which dust is filtered in the case **20** is introduced into the inside of the grill **240** and second air passing holes **241***b* from which the air introduced into the grill **240** escapes.

[0077] Dust may be filtered again while the air from which dust is filtered by the directed air current passes through the first air passing holes **241***a*. The air discharged via the second air passing holes **241***b* may move toward the side of the intermediate cover **23** via the outlet **202**.

[0078] The grill **240** may be provided with a locking hole **242** into which the locking part **212** provided at the lower cover **21** is inserted. When the locking part **212** is inserted into the locking hole **242**, the lower cover **21** may maintain a closed state in which a lower surface of the case **20** is not opened. When the locking part **212** leaves the locking hole **242**, the lower cover **21** may rotate about the rotating